

<b>DECLARATION FOR UTILITY PATENT APPLICATION</b> <b>(37 C.F.R. 1.63)</b>		Attorney Docket No.	169.12-0610
		First Named Inventor	Peter H. Clifton, et al.
		<b>COMPLETE IF KNOWN</b>	
<input checked="" type="checkbox"/> Declaration Submitted with Initial Filing	Declaration Submitted after Initial Filing (Surcharge (37 C.F.R. 1.16(e)) Required)	Application Number	
		Filing Date	Herewith
		Group Art Unit	
		Examiner Name	

As a below named inventor, I hereby declare that my residence, post office address, and citizenship are as stated below.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:  
**TMR SENSOR WITH OXIDIZED ALLOY BARRIER LAYER AND METHOD OF FORMING THE SAME**

the specification of which:

☒ is attached hereto OR

was filed on as United States Application Number or PCT International Application Number and was amended on (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Certified Copy Attached? Yes No

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)

DIRECT ALL CORRESPONDENCE TO:

Customer Number	00164
Attention	David R. Fairbairn
Telephone	(612) 339-1863
Fax	(612) 339-6580

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Sole or First Inventor:	
Given Name (First and middle (if any))	Family Name or Surname
Peter Hampden	Clifton
Inventor's signature	Date:
Residence	Eglinton, Londonderry, BT47 3AH, UK      Citizenship: UK
Mailing Address	62 Woodvale Road
City, State, Country	Eglinton, Londonderry, BT47 3AH, UK

Second Inventor:	
Given Name (First and middle (if any))	Family Name or Surname
Eric Walter	Singleton
Inventor's signature	Date: 1-23-2004
Residence	Maple Plain, MN      Citizenship: USA
Mailing Address	3035 Lakeshore Avenue
City, State, Country	Maple Plain, MN 55359 USA

<b>Third Inventor:</b>	
Given Name (First and middle (if any))	Family Name or Surname
David James	Larson
Inventor's signature	Date: 23 Jan 04
Residence	Northfield, MN 55057
Mailing Address	1200 Hawthorne Court
City, State, Country	Northfield, MN 55057 USA

<b>Fourth Inventor:</b>	
Given Name (First and middle (if any))	Family Name or Surname
Brian William	Karr
Inventor's signature	Date: 1/23/04
Residence	Savage, MN
Mailing Address	5237 145th Street West
City, State, Country	Savage, MN 55378 USA

<b>Fifth Inventor:</b>	
Given Name (First and middle (if any))	Family Name or Surname
Kristin Joy	Duxstad
Inventor's signature	Date: 1/24/04
Residence	Eden Prairie
Mailing Address	11067 Bluestem Lane
City, State, Country	Eden Prairie, MN 55347 USA

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor : Peter Clifton Appln. No. : Filed : Herewith Title : TMR SENSOR WITH OXIDIZED ALLOY BARRIER LAYER AND METHOD OF FORMING THE SAME Docket No. : I69.12-0610	Group Art Unit: Examiner:
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## SUBMISSION UNDER 37 C.F.R. 3.73(b)

Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Seagate Technology LLC, a Delaware limited liability corporation and having offices located at 920 Disc Drive, Scotts Valley, CA, 95066, is an owner of the patent application identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_, Frame \_\_, or a copy of which is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy of which is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_

-2-

The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy of which is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy of which is attached.

The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of Seagate Technology LLC.

Signature:



Date:

Feb 3, 2004

Title:

Paul T. Dietz, Reg. No. 38,858  
Patent Attorney

**POWER OF ATTORNEY**

Attorney Docket No.

169.12-0610

First Named Inventor : Peter Clifton

Title : TMR SENSOR WITH OXIDIZED ALLOY BARRIER LAYER  
AND METHOD OF FORMING THE SAME

In the patent application:

☒ identified above (and submitted to the Patent and Trademark Office herewith).☐ filed on \_\_\_\_\_ as Application No. \_\_\_\_\_.

I appoint the attorneys and agents associated with Customer Number 00164 to prosecute the patent application identified above and to transact all business in the Patent and Trademark Office connected therewith, including full power of association, substitution and revocation.

I ratify all prior actions taken by Kinney & Lange, P.A. or the attorneys and agents mentioned above in connection with the prosecution of the above-mentioned patent application.

I authorize Kinney & Lange, P.A. to mark the appropriate space above and to insert the filing date and application number of the application, as appropriate.

I aver that I am empowered by Seagate Technology LLC to act on behalf of the Assignee, Seagate Technology LLC, in connection with this document and the above application.

Please address all correspondence and telephone calls to Customer Number 00164, attention David R. Fairbairn, Telephone (612) 339-1863, Fax (612) 339-6580.

SEAGATE TECHNOLOGY LLC

Signature:

  
Paul T. Dietz, Reg. No. 38,858

Title:

Patent Attorney

Dated: Feb 3, 2004

U.S. Parent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)

## DIRECT ALL CORRESPONDENCE TO:

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Attention	David R. Fairbairn
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<b>Sole or First Inventor:</b>	
Given Name (First and middle (if any))	Family Name or Surname
Peter Hampden	Clifton
Inventor's signature	Date: 22-01-04
Residence	Eglinton, Londonderry, BT47 3AH, UK
	Citizenship: UK
Mailing Address	62 Woodvale Road
City, State, Country	Eglinton, Londonderry, BT47 3AH, UK

<b>Second Inventor:</b>	
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Eric Walter	Singleton
Inventor's signature	Date:
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	Citizenship: USA
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		<b>Group Art Unit</b>	
		<b>Examiner Name</b>	

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Application Number(s)	Filing Date (MM/DD/YYYY)

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<b>Third Inventor:</b>		
Given Name (First and middle (if any))		Family Name or Surname
David James		Larson
Inventor's signature	Date:	
Residence	Northfield, MN 55057	Citizenship: USA
Mailing Address	1200 Hawthorne Court	
City, State, Country	Northfield, MN 55057 USA	

<b>Fourth Inventor:</b>		
Given Name (First and middle (if any))		Family Name or Surname
Brian William		Karr
Inventor's signature	Date:	
Residence	Savage, MN	Citizenship: USA
Mailing Address	5237 145th Street West	
City, State, Country	Savage, MN 55378 USA	

<b>Fifth Inventor:</b>		
Given Name (First and middle (if any))		Family Name or Surname
Kristin Joy		Duxstad
Inventor's signature	Date:	
Residence	Eden Prairie	Citizenship: USA
Mailing Address	11067 Bluestem Lane	
City, State, Country	Eden Prairie, MN 55347 USA	

**IMPORTANT NOTICE**

Attorney Docket No.

**I69.12-0610****NOTICE TO:**

1. INVENTOR(S) SIGNING THIS APPLICATION
2. PERSONS ASSOCIATED WITH THIS APPLICATION

The Inventor(s), must read and approve the contents of this application including the Declaration before signing.

Under 37 C.F.R. 1.56, the inventor(s) and each individual substantively involved in the filing and prosecution of this patent application has a duty of candor and good faith in dealing with the U.S. Patent and Trademark Office ("PTO"), which includes a duty to disclose to the PTO all information known to that individual to be material to patentability as described below. **NO valid patent will be granted where fraud on the PTO was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct.** The PTO encourages you to carefully examine all information that may affect patentability, such as prior publications, prior disclosures to others, prior sales and offers for sale, prior art cited in foreign search reports and prior uses, to make sure that any material information is disclosed to the PTO.

Information is material to patentability when it establishes, by itself or in combination with other information, possible unpatentability of the invention, or it refutes, or is inconsistent with, a position the applicant takes in any arguments with the PTO.

To comply with this duty, you must disclose material information to us.

In sum, if you know of any pertinent prior uses or publications, or any sales or offers for sale of similar devices before this application is filed with the PTO, you must let us know. You must let us know this information whether the prior uses, publications, sales or offers for sale were made by you or others, or whether they were made for your invention or another similar device. Further, if you know of prior work on the same or a similar invention by someone other than the inventor(s) signing, you must also disclose this information to us.

If you have any questions, please ask them now. Complete disclosure is not only required, but will increase the likelihood of obtaining enforceable patent protection.

After the application is approved, the Declaration must be signed and dated by the inventor(s) in the spaces provided, and the entire application must be returned to us for filing in the PTO.

If you have any questions, please do not hesitate to call me.